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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,589	07/02/2003	Sakae Suda	1232-5077	5542
27123	7590	08/11/2006	EXAMINER	
MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101			SHOSHO, CALLIE E	
			ART UNIT	PAPER NUMBER

1714

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,589

Applicant(s)

SUDA ET AL.

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5 and 7-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5 and 7-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/19/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. All outstanding rejections are overcome by applicants' amendment filed 5/22/06.

The new grounds of rejection set forth below are necessitated by applicants' amendment and thus, the following action is final.

Information Disclosure Statement

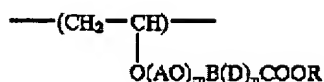
2. It is noted that "Marking Materials Supporting High Speed and High Resolution" (reference 40) has been stricken from the IDS filed 6/19/06 given that the reference fails to comply with 37 CFR 1.98(a)(3). Specifically, applicants have not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of the reference which is not in the English language.

Claim Rejections - 35 USC § 102

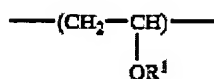
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-3, 5, and 7-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al. '343 (U.S. 2003/0236343).

Sato et al. '343 disclose dispersible composition including ink or toner comprising medium that is solvent or binder resin, functional substance, i.e. colorant, and amphipathic block polymer comprising monomer of the formula:

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and monomer of the formula:

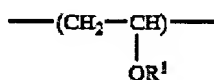


where A is straight chain or branched alkylene group having 1-15 carbon atoms, m is 0-30, B is single bond or alkylene, D is aromatic group, n is 1-10, R is hydrogen or alkyl group, and M is mono- or poly-valent cation and wherein R^1 is $(\text{CH}(\text{R}^2)\text{---CH}(\text{R}^3)\text{---O})_p\text{---R}^4$ wherein R^4 is phenyl that is unsubstituted or substituted with $\text{C}_1\text{---C}_4$ alkyl group, R^2 and R^3 are each hydrogen, and p is 1-18. The block polymer contains both hydrophobic and hydrophobic blocks. It is further disclosed that the colorant is encapsulated by the block polymer. There is also disclosed image forming method comprising applying the ink to substrate to form image (paragraphs 2, 22, 25-26, 31, 84-85, 87-88, 95-86, 99-101, 105, 127-128, 135, 141-143, 231-233, 244-249, 263, and 265).

In light of the above, it is clear that Sato et al. '343 anticipate the present claims.

5. Claims 1-3, 5, and 7-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Sato et al. '904 (U.S. 2003/0232904).

Sato et al. '904 disclose dispersible composition including ink or toner comprising medium that is solvent, functional substance, i.e. colorant, and amphipathic block polymer comprising monomer of the formula:



wherein R^1 is $(\text{CH}(\text{R}^5)\text{---}\text{CH}(\text{R}^6)\text{---}\text{O})_p\text{---}\text{R}^7$ wherein R^7 is phenyl that is unsubstituted or substituted with $\text{C}_1\text{---}\text{C}_4$ alkyl group, R^5 and R^6 are each hydrogen, and p is 1-18. The block polymer contains both hydrophobic and hydrophobic blocks. It is disclosed that the block polymer has 3 or more blocks wherein such blocks include those obtained from polyvinyl ether that contains residue of carboxylic acid. It is further disclosed that the colorant is encapsulated by the block polymer. There is also disclosed image forming method comprising applying the ink to substrate to form image (paragraphs 2, 7-11, 13-14, 16, 26, 28, 30-31, 34-36, 38-39, 46-47, 59-50, and 68).

In light of the above, it is clear that Sato et al. '904 anticipate the present claims.

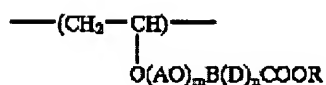
Response to Arguments

6. Applicants' arguments regarding Sato et al. '903 (U.S. 2003/0232903) have been fully considered but they are moot in view of the discontinuation of the use of this reference against the present claims.

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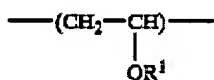
7. Applicants' arguments filed 5/22/06 have been fully considered but, with the exception of arguments relating to Sato et al. '903, they are not persuasive.

Specifically, applicants argue that Sato et al. '343 is not a relevant reference against the present claims given that Sato et al. '343 disclose block polymer comprising monomer of the formula:



which requires ---COOR terminal group. Applicants argue that such terminal group is not required in the present claims in light of the amendment to the present claims that requires "D" is unsubstituted or substituted with alkyl or alkoxy.

However, while it is agreed that the block polymer of Sato et al. '343 is obtained from monomer of the above formula, attention is drawn to paragraphs 231-233, 244-249, 263, and 265 of Sato et al. '343 that disclose block polymer obtained from the above monomer as well as vinyl ether of the formula:



wherein R^1 is $(\text{CH}(\text{R}^2)\text{---CH}(\text{R}^3)\text{---O})_p\text{---R}^4$ wherein R^4 is phenyl that is unsubstituted or substituted with $\text{C}_1\text{---C}_4$ alkyl group, R^2 and R^3 are each hydrogen, and p is 1-18 which meets the requirements of the present claims with respect to formula(1).

Thus, while it is agreed that the block polymer of Sato et al. '343 does require monomer that has terminal -COOR group, given that Sato et al. '343 disclose that the block polymer is also obtained from monomer identical to that of presently claimed formula (1), it is the examiner's position that Sato et al. '343 remains a relevant reference against the present claims.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

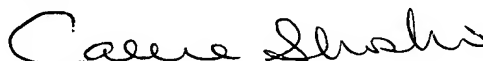
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
8/4/06